## ABSTRACT OF THE DISCLOSURE

An IP network communication apparatus within a local station transmits a control packet including the time of transmission of the control packet to an opposing station by 5 way of an IP network. When receiving the control packet sent back thereto from the opposing station by way of the IP network, the IP network communication apparatus calculates a transmission path delay that IP packets undergo during one round trip between the local station and the opposing station from the time of the receipt of the control packet and the transmission 10 time. As a result, even if there is a difference between a transmission path from the sending side to the receiving side and a transmission path from the receiving side to the sending side, the IP network communication apparatus can determine the 15 transmission path delay with a high degree of accuracy.